

Christopher Uyeda

Curriculum Vitae

Department of Chemistry
Purdue University
560 Oval Dr.
West Lafayette, IN 47907

Phone: (765) 494-5268
E-mail: cuyeda@purdue.edu
Group website: <http://www.chem.purdue.edu/uyeda/>
Date of Birth: Sept. 7, 1983

EDUCATION

- 2005–2011 **Harvard University, Cambridge, MA**
Ph.D. Chemistry, March 2011
- 2001–2005 **Columbia University, New York, NY**
B.S. Biomedical Engineering, *summa cum laude*, May 2005

ACADEMIC EXPERIENCE

- 2024–present **Herbert C. Brown Professor**
2022–2024 **Richard B. Wetherill Professor**
2020–2022 **Richard B. Wetherill Associate Professor**
2019–2020 **Associate Professor**
2013–2019 **Assistant Professor**
Purdue University, Department of Chemistry, West Lafayette, IN
- 2011–2013 **NSF Center for Chemical Innovation Postdoctoral Fellow**
California Institute of Technology, Department of Chemistry, Pasadena, CA
Research Advisor: Professor Jonas Peters
- 2005–2010 **Graduate Research Assistant**
Harvard University, Department of Chemistry and Chemical Biology, Cambridge, MA
Research Advisor: Professor Eric N. Jacobsen
Dissertation: Catalysis of the Claisen Rearrangement by Hydrogen-Bond Donors
- 2002–2005 **Undergraduate Research Assistant**
Columbia University, Chemistry Department, New York, NY
Research Advisor: Professor Ronald Breslow

AWARDS AND HONORS

- 2024 Purdue College of Science Research Award
2024 International Organic Chemistry Foundation (IOCF) Zen-ichi Yoshida Lectureship
2024 Japan Society for the Promotion of Science (JSPS) Fellowship
2023 Herbert C. Brown Named Professorship
2021 Korean Chemical Society Emerging Researchers in Organic Chemistry Symposium Speaker
2020 Richard B. Wetherill Term Named Professorship
2019 Lilly Grantee Award
2019 Camille Dreyfus Teacher-Scholar Award
2019 Kavli Fellow
2019 Padwa Lecturer, Columbia University
2018 Purdue Seeds for Success Award
2018 Purdue College of Science Award for Outstanding Contributions to Undergraduate Teaching
2018 Thieme Chemistry Journals Award
2017 ACS Division of Organic Chemistry Young Investigator Symposium Speaker
2017 NIH Maximizing Investigators' Research Award
2016 Alfred P. Sloan Foundation Research Fellowship
2016 NSF CAREER Award
2015 ACS PRF Doctoral New Investigator
2011–2013 NSF Center for Chemical Innovation Postdoctoral Fellowship
2010 Fieser Lecture in the Chemical Sciences, Harvard University
2008 Christensen Prize for Outstanding Research Achievement

2006	Robert B. Woodward Fellow
2005	Tau Beta Pi Engineering Honor Society
2004	Pfizer Synthetic Organic Chemistry Summer Undergraduate Research Fellowship

PUBLICATIONS

*Corresponding author

- (55) Rybak, C. J.; Fan, C.; Sharma, P.; Uyeda, C.* "Dinickel-Catalyzed N=N Coupling Reactions for the Synthesis of Hindered Azoarenes" *J. Am. Chem. Soc.* **2024**, *146*, 29720–29727.
- (54) Liu, M.; Uyeda, C.* "Redox Approaches to Carbene Generation in Catalytic Cyclopropanation Reactions." *Angew. Chem. Int. Ed.* **2024**, e202406218.
- (53) Algera, R. F.; Allais, C.; Baldwin, A. F.; Busch, T.; Colombo, F.; Colombo, M.; Depretz, C.; Dumond, Y. R.; Faria Quintero, A. R.; Heredia, M.; Jung, J.; Lall, A.; Lee, T.; Liu, Y.; Mandelli, S.; Mantel, M.; Morris, R.; Mustakis, J.; Nguyen, B.; Pearson, R.; Piper, J. L.; Ragan, J. A.; Ruffin, B.; Talicska, C.; Tcyrulnikov, S.; Uyeda, C.; Weekly, R. M.; Zeng, M. "Synthesis of Nirmatrelvir: Development of a Scalable Cobalt-Catalyzed Cyclopropanation for Manufacture of the Bicyclic [3.1.0]Proline-Building Block" *Org. Process Res. Dev.* **2023**, *27*, 2260–2270.
- (52) Liu, M.; Le, N.; Uyeda, C. "Nucleophilic Carbenes Derived from Dichloromethane" *Angew. Chem. Int. Ed.* **2023**, *62*, e202308913.
- (51) Kanale, V. V.; Uyeda, C.* "Catalytic Asymmetric Ring-Opening Reactions of Unstrained Heterocycles Using Cobalt Vinylidenes" *Angew. Chem. Int. Ed.* **2023**, *62*, e202309681.
- (50) Bishop, H. D.; Zhao, Q.; Uyeda, C.* "Catalytic Asymmetric Synthesis of Zinc Metallacycles" *J. Am. Chem. Soc.* **2023**, *145*, 20152–20157.
- (49) Berger, K. E.; Martinez, R. J.; Zhou, J. Uyeda, C.* "Catalytic Asymmetric Cyclopropanations with Nonstabilized Carbenes." *J. Am. Chem. Soc.* **2023**, *145*, 9441–9446.
[ACS Editors' Choice]
- (48) Rybak, C. J.; Andjaba, J. M.; Fan, C.; Zeller, M.; Uyeda, C.* "Dinickel-Catalyzed N=N Bond Rotation." *Inorg. Chem.* **2023**, *62*, 5886–5891.
- (47) Wang, Z.; Andjaba, J. M.; Rybak, C.; You, L.; Uyeda, C.*; Mei, J.* "Black-to-Transmissive Dual Polymer Complementary Electrochromics with High Coloration Efficiency." *Chem. Eng. J.* **2023**, *456*, 141013.
- (46) Uyeda, C.*; Kalb, A. E. "Catalytic Reductive Carbene Transfer Reactions." *Chem. Catal.* **2022**, *2*, 667–678.
- (45) Kalb, A. E.; Liu, M.; Bosso, M. I.; Uyeda, C.* "A Dinickel-Catalyzed Three-Component Cycloaddition of Vinylidenes." *Chem. Sci.* **2022**, *13*, 11190–11196.
- (44) Steiman, T. J.; Kalb, A. E.; Coombs, J. C.; Kirkland, J. K.; Torres, H.; Ess, D. H.; Uyeda, C.* "Dinickel-Catalyzed Vinylidene-Alkene Cyclization Reactions." *ACS Catal.* **2021**, *11*, 14408–14416.
- (43) Uyeda, C.*; Farley, C. M. "Dinickel Active Sites Supported by Redox-Active Ligands." *Acc. Chem. Res.* **2021**, *54*, 3710–3719.
- (42) Andjaba, J. M.; Rybak, C. J.; Wang, Z.; Uyeda, C.* "Catalytic Synthesis of Conjugated Azopolymers from Aromatic Diazides" *J. Am. Chem. Soc.* **2021**, *143*, 3975–3982.
- (41) Kang, H.; Uyeda, C.* "Nickel-Catalyzed Vinylidene Insertions into O–H Bonds" *ACS Catal.* **2021**, *11*, 193–198.
- (40) Maity, A. K.; Kalb, A. E.; Zeller, M.; Uyeda, C.* "A Dinickel Catalyzed Cyclopropanation without the Formation of a Metal Carbene Intermediate." *Angew. Chem., Int. Ed.* **2021**, *60*, 1897–1902.
- (39) Biswas, S.; Pal, S.; Uyeda, C. "Nickel-Catalyzed Insertions of Vinylidenes into Si–H Bonds" *Chem. Commun.* **2020**, *56*, 14175–14178.

- (38) Powers, I. G.; Andjaba, J. M.; Zeller, M.; Uyeda, C.* "Catalytic C(sp²)-H Amination Reactions Using Dinickel Imides." *Organometallics* **2020**, *39*, 3794–3801.
- (37) Behlen, M. J.; Uyeda, C.* "C₂-Symmetric Dinickel Catalysts for Enantioselective [4 + 1]-Cycloadditions." *J. Am. Chem. Soc.* **2020**, *142*, 17294–17300.
- (36) Farley, C. M.; Sasakura, K.; Zhou, Y.-Y.; Kanale, V. V.; Uyeda, C. "Catalytic [5 + 1]-Cycloadditions of Vinylcyclopropanes and Vinylidenes." *J. Am. Chem. Soc.* **2020**, *142*, 4598–4603.
- (35) Werth, J.; Berger, K.; Uyeda, C.* "Cobalt Catalyzed Reductive Spirocyclopropanation Reactions." *Adv. Synth. Catal.* **2020**, *362*, 348–352.
[Dedicated to Prof. Eric Jacobsen on the occasion of his 60th birthday]
- (34) Farley, C. M.; Uyeda, C.* "Organic Reactions Enabled by Catalytically Active Metal–Metal Bonds." *Trends in Chemistry* **2019**, *1*, 497–509.
[Invited Review: Special Issue on Transition Metal Catalysis]
- (33) Adolph, C. M.; Lee, S. A.; Uyeda, C.* "Dinickel Catalyzed Carbonylation Reactions Using Metal Carbonyl Reagents as CO Sources." *Tetrahedron* **2019**, *75*, 3336–3340.
[Invited Contribution: Ryan Shenvi Tetrahedron Award Issue]
- (32) Zhou, Y.-Y.; Uyeda, C.* "Catalytic Reductive [4 + 1]-Cycloadditions of Vinylidenes and Dienes." *Science* **2019**, *363*, 857–862.
[Highlight in Synfacts by M. Lautens and E. Larin]
[Perspective in Science by K. Johnson and D. Weix]
[News Article in C&E News (Vol. 97, Issue 8)]
- (31) Farley, C. M.; Zhou, Y.-Y.; Banka, N.; Uyeda, C.* "Catalytic Reductive Cyclopentanations of Enones." *J. Am. Chem. Soc.* **2018**, *140*, 12710–12714.
[Selected as an ACS Editor's Choice Article]
- (30) Werth, J.; Uyeda, C.* "Transition Metal Catalyzed Reductive Dimethylcyclopropanations of 1,3-Dienes." *Angew. Chem., Int. Ed.* **2018**, *57*, 13902–13906.
[Highlight in Synfacts by P. Knochel and D. Ziegler]
- (29) Maity, A. K.; Zeller, M.; Uyeda, C.* "Carbene Formation and Transfer at a Dinickel Active Site." *Organometallics* **2018**, *37*, 2437–2441.
- (28) Powers, I. G.; Andjaba, J. M.; Luo, X.; Mei, J.; Uyeda, C.* "Catalytic Azoarene Synthesis by a Dinuclear Ni Complex" *J. Am. Chem. Soc.* **2018**, *140*, 4110–4118.
- (27) Rounds, H. R.; Zeller, M.; Uyeda, C.* "Dinuclear Pathways for the Activation of Strained Three-Membered Rings" *Organometallics*, **2018**, *37*, 545–550.
- (26) Werth, J.; Uyeda, C.* "Regioselective Simmons–Smith-Type Cyclopropanations of Polyalkenes Enabled by Transition Metal Catalysis" *Chem. Sci.* **2018**, *9*, 1604–1609.
[Highlight in Synfacts by P. Knochel and D. Ziegler]
- (25) Hartline, D. R.; Zeller, M.; Uyeda, C.* "Catalytic Carbonylative Rearrangement of Norbornadiene via Dinuclear Carbon–Carbon Oxidative Addition" *J. Am. Chem. Soc.* **2017**, *139*, 13672–13675.
- (24) Pal, S.; Zhou, Y.-Y.; Uyeda, C.* "Catalytic Reductive Vinylidene Transfer Reactions" *J. Am. Chem. Soc.* **2017**, *139*, 11686–11689.
- (23) Kwon, D.-H.; Proctor, M.; Mendoza, S.; Uyeda, C.; Ess, D. H.* "Catalytic Dinuclear Nickel Spin Crossover Mechanism and Selectivity for Alkyne Cyclotrimerization" *ACS Catal.* **2017**, *7*, 4796–4804.

- (22) Steiman, T. J.; Uyeda, C. "Dinickel, 1,1(-(1,8-Naphthyridine-2,7-diyl)bis[N-(2,6-diisopropylphenyl)ethan-1-imine](benzene)" *e-EROS* **2017**.
- (21) Adolph, C. M.; Werth, J.; Selvaraj, R.; Wegener, E. C.; Uyeda, C.* "Dehydrogenative Transformations of Imines Using a Heterogeneous Photocatalyst" *J. Org. Chem.* **2017**, *82*, 5959–5965.
- (20) Powers, I. G.; Kiattisewee, C.§; Mullane, K. C.; Schelter, E. J.; Uyeda, C.* "A 1,2-Addition Pathway for C(sp²)-H Activation at a Dinickel Imide" *Chem. Eur. J.* **2017**, *23*, 7694–7697.
- (19) Powers, I. G.; Uyeda, C.* "Metal–Metal Bonds in Catalysis." *ACS Catal.* **2017**, *7*, 936–958.
- (18) Behlen, M. J.; Zhou, Y.-Y.; Steiman, T. J.; Pal, S.; Hartline, D. R.; Zeller, M.; Uyeda, C.* "Dinuclear Oxidative Addition Reactions Using an Isostructural Series of Ni₂, Co₂, and Fe₂ Complexes." *Dalton Trans.* **2017**, *46*, 5493–5497. [Invited contribution to a themed issue "Multimetallic Complexes: Synthesis and Applications"]
- (17) Hartline, D. R.; Uyeda, C.* "Well-Defined Models for the Elusive Dinuclear Intermediates of the Pauson–Khand Reaction." *Angew. Chem., Int. Ed.* **2016**, *55*, 6084–6087.
- (16) Zhou, Y.-Y.; Uyeda, C.* "Reductive Cyclopropanations Catalyzed by Dinuclear Nickel Complexes." *Angew. Chem., Int. Ed.* **2016**, *55*, 3171–3175.
- (15) Uyeda, C.*; Steiman, T. J.; Pal, S. "Catalytically Active Nickel–Nickel Bonds Using Redox-Active Ligands." *Synlett* **2015**.
- (14) Pal, S.; Uyeda, C.* "Evaluating the Effect of Catalyst Nuclearity in Ni-Catalyzed Alkyne Cyclotrimerizations." *J. Am. Chem. Soc.* **2015**, *137*, 8042–8045.
- (13) Steiman, T. J.; Uyeda, C.* "Reversible Substrate Activation and Catalysis at an Intact Metal–Metal Bond Using a Redox-Active Supporting Ligand." *J. Am. Chem. Soc.* **2015**, *137*, 6104–6110.
- (12) Zhou, Y.-Y.; Hartline, D. R.; Steiman, T. J.; Fanwick, P. E.; Uyeda, C.* "Dinuclear Nickel Complexes in Five States of Oxidation Using a Redox-Active Ligand." *Inorg. Chem.* **2014**, *53*, 11770–11777.
- (11) Huo, P.; Uyeda, C.; Goodpaster, J. D.; Peters, J. C.; Miller III, T. F. "Breaking the Correlation between Energy Costs and Kinetic Barriers in Hydrogen Evolution via a Cobalt Pyridine-Diimine-Dioxime Catalyst." *ACS Catal.* **2016**, *6*, 6114–6123.
- (10) Uyeda, C.; Peters, J. C.* "Selective Nitrite Reduction at Heterobimetallic CoMg Complexes." *J. Am. Chem. Soc.* **2013**, *135*, 12023–12031.
- (9) Uyeda, C.; Tan, Y.; Fu, G. C.*; Peters, J. C.* "A New Family of Nucleophiles for Photoinduced, Copper-Catalyzed Cross-Couplings via Single-Electron Transfer: Reactions of Thiols with Aryl Halides under Mild Conditions (0 °C)." *J. Am. Chem. Soc.* **2013**, *135*, 9548–9552.
- (8) Brown, A. R.; Uyeda, C.; Brotherton, C. A.; Jacobsen, E. N.* "Enantioselective Thiourea-Catalyzed Intramolecular Cope-Type Hydroamination." *J. Am. Chem. Soc.* **2013**, *135*, 6747–6749.
- (7) Uyeda, C.; Peters, J. C.* "Access to Formally Ni(I) States in a Heterobimetallic NiZn System." *Chem. Sci.* **2013**, *4*, 157–163.
- (6) McCrory, C. C. L.§; Uyeda, C.§; Peters, J. C.* "Electrocatalytic Hydrogen Evolution in Acidic Water with Molecular Cobalt Tetraazamacrocycles." *J. Am. Chem. Soc.* **2012**, *134*, 3164–3170. (§Equal Contributions)
- (5) Uyeda, C.; Jacobsen, E. N.* "Transition State Charge Stabilization through Multiple Non-Covalent Interactions in the Guanidinium-Catalyzed Enantioselective Claisen Rearrangement." *J. Am. Chem. Soc.* **2011**, *133*, 5062–5075.
- (4) Uyeda, C.; Rötheli, A. R.; Jacobsen, E. N.* "Catalytic Enantioselective Claisen Rearrangements of *O*-Allyl β -Ketoesters." *Angew. Chem. Int. Ed.* **2010**, *122*, 9947–9950.

- (3) Uyeda, C.; Jacobsen, E. N.* "Enantioselective Claisen Rearrangements with a Hydrogen-Bond Donor Catalyst." *J. Am. Chem. Soc.* **2008**, *130*, 9228–9229.
- (2) Uyeda, C.; Biscoe, M. R.; LePlae, P.; Breslow, R.* "Hydrophobically Directed Selective Reduction of Ketones using Amine Boranes." *Tetrahedron Lett.* **2005**, *47*, 127–130.
- (1) Biscoe, M. R.; Uyeda, C.; Breslow, R.* "Requirements for Selective Hydrophobic Acceleration in the Reduction of Ketones." *Org. Lett.* **2004**, *6*, 4331–4334.

Patents

- (1) Mei, J.; Uyeda, C.; Andjaba, J.; Rybak, C. "Conjugated Polymers Made from Aromatic Azides and Methods for Making Same." US-11692064-B2, Publication Date: July 4, 2023.

INVITED LECTURES

94. ACS National Meeting (Chemistry Across the Border) San Diego, CA; March 2025
93. University of Louisville, Louisville, KY; Feb. 2025
92. University of Texas – San Antonio, San Antonio, TX; Nov. 2024
91. Southeastern Regional Meeting of the ACS (New Structures and Properties of Multinuclear Late Transition Metal Complexes) Atlanta, GA; Oct. 2024
90. Catalysis Innovation Consortium Meeting, Atlanta, GA; Oct. 2024
89. University of Rochester, Rochester, NY; *Kende Lectures*; Sept. 2024
88. University of South Florida, Tampa, FL; Aug. 2024
87. National Cheng Kung University, Taiwan; June 2024
86. National Yang Ming Chiao Tung University, Taiwan; June 2024
85. National Taiwan University, Taiwan; June 2024
84. Kyushu University, Japan; May 2024
83. Osaka University, Japan; May 2024
82. Kyoto University, Graduate School of Engineering, Japan; May 2024
81. Kyoto University, Graduate School of Science, Japan; *IOCF Zen-ichi Yoshida Lectureship*; May 2024
80. Nagoya University, Japan; May 2024
79. Tokyo Institute of Technology, Japan; May 2024
78. University of Tokyo, Japan; May 2024
77. Hokkaido University, Japan; May 2024
76. UCLA, Los Angeles, CA; May 2024
75. Boston College, Boston, MA; April 2024
74. ACS National Meeting (F. Albert Cotton Award Symposium Honoring Suzanne Bart) New Orleans, LA; March 2024
73. Massachusetts Institute of Technology, Cambridge, MA; Feb. 2024
72. Yale University, New Haven, CT; Nov. 2023
71. Merck Process Chemistry, Rahway, NJ, Aug. 2023
70. ACS National Meeting (Advances in Carbene Chemistry) San Francisco, CA; Aug. 2023
69. International Symposium on Carbene and Nitrene Chemistry, Amsterdam, Netherlands; July 2023
68. Utrecht University, Utrecht, Netherlands; July 2023
67. Institut Català d'Investigació Química, Tarragona, Spain; July 2023
66. Corteva, Indianapolis, IN; June 2023
65. Canadian Chemistry Conference and Exhibition (Synthesis of Complex Molecules North and South of the Border) Vancouver, CA; June 2023
64. ACS National Meeting (Theoretical and Experimental Approaches to Catalyst Development) Indianapolis, IN; March 2023
63. ACS National Meeting (Green Chemistry and Engineering: Designing and Discovering Innovative Solutions to Achieve a Sustainable Future) Indianapolis, IN; March 2023
62. Harvard University, Cambridge, MA; Feb. 2023
64. Duke University, Durham, NC; Jan. 2023
63. Winter In-Person Organic Symposium (WIPOS), Honolulu, HI; Dec. 2022
62. Shanghai University, China; Nov. 2022 (Virtual)
61. California Institute of Technology, Pasadena, CA; April 2022
60. Auburn University, Auburn, AL; Sept. 2021
59. Eli Lilly Grantee Symposium, Indianapolis, IN; Sept. 2021 (Virtual)
58. Imperial College, London, UK; April 2021 (Virtual)

57. Korean Chemical Society Meeting; *Emerging Researchers in Organic Chemistry Symposium*; April 2021 (Virtual)
56. Bristol-Myers Squibb, Lawrenceville, NJ, New Brunswick, NJ; Feb. 2021 (Virtual)
55. University of Pennsylvania, Philadelphia, PA; March 2021 (Virtual)
54. Virginia Tech, Blacksburg, VA; Feb. 2021 (Virtual)
53. Gilead, Foster City, CA; Dec. 2020 (Virtual)
52. Brandeis University, Waltham, MA; Nov. 2020 (Virtual)
51. Scripps Research Institute, La Jolla, CA; Nov. 2019
50. Loyola University Chicago, Chicago, IL; Oct. 2019
49. Baylor University, Waco, TX; Sept. 2019
48. Texas A&M, College Station, TX; Sept. 2019
47. University of Houston, Houston, TX; Sept. 2019
46. ACS National Meeting (Emerging Research in Molecular Synthesis and Catalysis) San Diego, CA; Aug. 2019
45. Gordon Research Conference (Inorganic Reaction Mechanisms) Galveston, TX; March 2019
44. Columbia University, New York, NY; *Padwa Lecture*; Jan. 2019
43. ExxonMobil, Baytown, TX; Nov. 2018
42. Merck Process Chemistry, Rahway, NJ; Nov. 2018
41. Boston College, Boston, MA; Oct. 2018
40. University of Wisconsin–Madison, WI; Sept. 2018
39. University of California–Berkeley, CA; Sept. 2018
38. University of Arizona, Tucson, AZ; Aug. 2018
37. ACS National Meeting (Symposium honoring Prof. Tianning Diao, Organometallics Distinguished Author Symposium); Boston, MA; Aug. 2018
36. Eli Lilly; Indianapolis, IN; July 2018
35. University of Chicago, Chicago, IL; May 2018
34. Stanford University, Palo Alto, CA; May 2018
33. Indiana University, Indianapolis, IN; April; 2018
32. University of North Carolina–Chapel Hill; April 2018
31. Ohio State University, OH; March 2018
30. University at Buffalo, NY; March 2018
29. University of Illinois–Urbana Champagne, IL; Feb. 2018
28. University of California–Santa Barbara, CA; Feb. 2018
27. University of California–Irvine, CA; Feb. 2018
26. University of Southern California, Los Angeles, CA; Feb. 2018
25. Michigan State University, East Lansing, MI; Feb. 2018
24. University of Minnesota, Minneapolis, MN; Jan. 2018
23. Brigham Young University, Provo, UT; Jan. 2018
22. Indo–US Bilateral Meeting on Organometallic Chemistry, India; Dec. 2017
21. Indian Institute of Technology–Bombay, India; Dec. 2017
20. International Seminar for Young Chemists on Precisely Designed Catalysts, Japan; Nov. 2017
19. Osaka University, Japan; Nov. 2017
18. Kyoto University, Japan; Nov. 2017
17. University of Tokyo, Japan; Nov. 2017
16. University of Rochester, Rochester, NY; Oct. 2017
15. New York University, New York, NY; Oct. 2017
14. Princeton University, Princeton, NJ; Sept. 2017
13. ACS National Meeting; *Division of Organic Chemistry Young Investigator Symposium*; Washington, D.C.; Aug. 2017
12. Gordon Research Conference (Organic Reactions and Processes) Stonehill College, MA; July, 2017
11. ACS Green Chemistry and Engineering Conference (Making Our Way to a Sustainable Tomorrow); Washington, DC; April 2017
10. University of California–Riverside, Riverside, CA; April 2017
9. Gordon Research Conference (Inorganic Reaction Mechanisms) Short Talk, Galveston, TX; March 2017
8. Emory University, Atlanta, GA; Feb. 2017
7. Gordon Research Conference (Organometallics) Short Talk, Salve Regina, RI; July 2016
6. Dow AgroSciences, Indianapolis, IN; May 2016
5. ACS Central Regional Meeting (Frontiers in Organometallic Chemistry Symposium); Covington, KY; May 2016
4. ACS National Meeting (Alpha Olefins Symposium); San Diego, CA; March 2016
3. Eastern Illinois University, Charleston, IL; Nov. 2015
2. Ball State University, Muncie, IN; Feb. 2015
1. University of Texas at El Paso, El Paso, TX; Oct. 2014

PROFESSIONAL ACTIVITIES

2022–present	Associate Editor; <i>Science Advances</i>
2022–present	Consultant; Pfizer Process Chemistry Commercialization of our cyclopropanation reaction for the synthesis of Nirmatrelvir (for details, see: <i>ACS Cent. Sci.</i> 2023 , 9, 849–857 and <i>Org. Process Res. Dev.</i> 2023 , 27, 2260–2270)
2021–present	Faculty Mentor for the Purdue Emerging Leader Science Scholar (ELSS) Program (program promoting excellence in high-performing students from underrepresented minority groups)
2023	Symposium Chair; “Advances in Carbene Chemistry” ACS National Meeting; San Francisco, CA
2023	Discussion Leader, Organometallics GRC
2017–2019	Summer Science Program (presented guest lectures on the organic chemistry of drug discovery to groups of high school students)
2014–2019	Served as a research mentor for local high school students through ACS Project SEED and my NSF CAREER award (CHE-1554787)
2018	Inorganic Chemistry GRS, Discussion Leader and Career Panelist’
2014–2017	Soybean Product Innovation Competition, Faculty Mentor

Manuscript Reviewer: >30 scientific journals

Grant Reviewer (Panels and ad hoc): NIH NIGMS Chemical Synthesis and Biosynthesis (CSB) Panel, NIH NIGMS Special Emphasis Panel, NSF CAREER Program, NSF Catalysis Program, ACS PRF DNI and ND Programs, DOE BES Catalysis Program, Deutsche Forschungsgemeinschaft (German Research Foundation)

Industry Consulting and Research Visits: Dow AgroSciences, Eli Lilly, Merck Process Chemistry, ExxonMobil Chemical Company, Gilead Process Chemistry, Bristol Myers Squibb, Alexion.

Purdue University:

2023–present	Area Promotions Committee, Member
2022–present	Department of Chemistry Organic Division, Chair
2022–present	Graduate Recruiting Committee, Chair
2021–present	Department Mental Health Committee, Member
2016–present	Service Course Committee, Member
2022	H.C. Brown Symposium, Chair
2019–2020	Inorganic Junior Faculty Search Committee, Chair
2019	College of Science Undergraduate Career Panel, Panelist
2018–2019	Inorganic Senior Faculty Search Committee, Chair
2017–2018	Organic Faculty Search Committee, Member
2014–2015	H.C. Brown Graduate Research Award Committee
2013–2016	Diversity Implementation Committee
2013–2019	H.C. Brown Symposium, Session Chair

EDUCATIONAL ACTIVITIES

Semester and Year	Course Number, Credit Hours, and Type	Title of Course	Number of Students	Student Classification
Spring 2025	CHM 255, 3 cr, lecture	Organic Chemistry	320	Undergraduate
Fall 2023	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	42	Graduate
Spring 2023	CHM 255, 3 cr, lecture	Organic Chemistry	236	Undergraduate
Fall 2022	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	35	Graduate
Spring 2022	CHM 255, 3 cr, lecture	Organic Chemistry	246	Undergraduate
Fall 2021	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	45	Graduate
Spring 2021	CHM 255, 3 cr, lecture	Organic Chemistry	456	Undergraduate
Fall 2020	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	43	Graduate
Spring 2020	CHM 255, 3 cr, lecture	Organic Chemistry	367	Undergraduate
Fall 2019	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	38	Graduate
Spring 2019	CHM 255, 3 cr, lecture	Organic Chemistry	466	Undergraduate
Fall 2018	CHM 651, 3 cr, lecture	Advanced Organic Chemistry	43	Graduate

Spring 2018	CHM 696, 3 cr, lecture	Catalytic Methods and Mechanisms in Organic Synthesis	23	Graduate
Fall 2017	CHM 255, 3 cr, lecture	Organic Chemistry	297	Undergraduate
Spring 2017	CHM 696, 3 cr, lecture	Catalytic Methods and Mechanisms in Organic Synthesis	19	Graduate
Fall 2016	CHM 255, 3 cr, lecture	Organic Chemistry	262	Undergraduate
Spring 2016	CHM 696, 3 cr, lecture	Catalytic Methods and Mechanisms in Organic Synthesis	25	Graduate
Fall 2015	CHM 255, 3 cr, lecture	Organic Chemistry	331	Undergraduate
Spring 2015	CHM 696, 3 cr, lecture	Catalytic Methods and Mechanisms in Organic Synthesis	12	Graduate
Fall 2014	CHM 255, 3 cr, lecture	Organic Chemistry	351	Undergraduate
Fall 2013	CHM 255, 3 cr, lecture	Organic Chemistry	361	Undergraduate

MENTORSHIP ACTIVITIES

MS and PhD students graduated

17. Jasan Janbabel; PhD: Dec. 2024

16. Vibha Kanale; PhD: May 2024

Distinctions: H.C. Brown Poster Award

Current Position: Scientist, Eastman Chemical Company

15. Kristen Berger; PhD: May 2023

Distinctions: H.C. Brown Seminar Award, H. C. Brown Research Award

Current Position: Postdoc, Todd Hyster (Princeton University)

14. Sourish Biswas; entered: Aug. 2017; PhD: May 2023

Current Position: Postdoc, Coreva Agriscience

13. Annah Kalb; May 2022

Distinctions: Emerson Kampen Fellow

Current Position: Visiting Assistant Professor, Wabash College

12. Courtney Nuyen; MS: May 2022

Distinctions: Ross Fellowship

Current Position: Senior Chemist, Lilly

11. John Andjaba; PhD: Aug. 2021

Distinctions: H.C. Brown Poster Award; Charles Viol Fellowship; PINDU Seminar Award

Current Position: Synthetic Chemistry Advisor, Lilly

10. Conner Farley; PhD: May 2020

Distinctions: Arthur Kelly Teaching Award; H.C. Brown Poster Award; H.C. Brown Seminar Award

Current Position: Senior Scientist, Pfizer

9. Michael Behlen; PhD: May 2020

Distinctions: PINDU Poster Award; H.C. Brown Seminar Award

Current Position: UC Berkeley Law School

8. Jacob Werth; PhD: Aug. 2019

Distinctions: H.C. Brown Travel Award; H.C. Brown Graduate Research Award

Current Position: Senior Scientist, Pfizer

7. Shawn Montag; MS: July 2018

Current Position: Lecturer, Bradley University

6. Ian Powers; PhD: July 2018

Distinctions: Ross Fellowship; NSF Graduate Research Fellowship; Charles Cameron Professional Development Award; Ian P. Rothwell Outstanding Research Seminar Award; H.C. Brown Symposium Poster Award

Current Position: Principal R&D Chemist, Strem Chemicals

5. **Sudipta Pal**; PhD: July 2018

Distinctions: Negishi–Brown Symposium Poster Award; H.C. Brown Seminar Award; H.C. Brown Travel Grant; 21st International Conference on Organic Synthesis RSC Poster Prize; Kokes Award, 25th North American Catalysis Society Meeting; Women in Science Travel Award; ACS Organic Division Travel Grant; PINDU Speaker; Organometallics GRS Speaker

Current Position: Associate Research Scientist, Dow

4. **Colby Adolph**; PhD: July 2018

Distinctions: Teaching Academy Graduate Teaching Award; Next Generation Scholar Symposium Poster Award; AGEP Scholarship; Affiliation with the Diversity Transformation Award, NOBCCHE, and membership chair for the Black Graduate Student Association

Current Position: Director of Sales, Evonik

3. **Heather Rounds**; PhD: May 2018

Distinctions: co-chair of Graduate student Symposium Planning Committee: 251st ACS National Meeting; graduate safety head teaching assistant

Current Position: Program Manager, MRI Global

2. **Talia Steiman**; PhD: May 2018

Distinctions: Bilsland Dissertation Fellowship; Charles Cameron Professional Development Award; H.C. Brown Seminar Award; H.C. Brown Travel Award; H.C. Brown Symposium Poster Award; Negishi–Brown Symposium Poster Award; PINDU Speaker; Organic Division representative on the Graduate Student Advisory Board

Current Position: Scientist, Amgen

1. **Douglas Hartline**; PhD: May 2018

Distinctions: PRF Graduate Research Fellowship

Current Position: Research Chemist, Johnson Matthey

Current graduate students

16. **Andrew Katchmar**; entered: Aug. 2024; expected PhD: May 2029

15. **Eugene Sagawa**; entered: Aug. 2024; expected PhD: May 2029

14. **Upanshu Shekhar**; entered: Aug. 2024; expected PhD: May 2029

13. **Mina Truesdale**; entered: Aug. 2024; expected PhD: May 2029

12. **Peter Cismaru**; entered: Aug. 2023; expected PhD: May 2028

Distinctions: Ross Fellowship; Presidential Doctoral Excellence Fellowship

11. **Divya Garg**; entered: Aug. 2023; expected PhD: May 2028

10. **Deepesh Kumar**; entered: Aug. 2023; expected PhD: May 2028

9. **Meenakshi Onattu**; entered: Aug. 2023; expected PhD: May 2028

8. **Parijat Sharma**; entered: Aug. 2023; expected PhD: May 2028

7. **Sumeet Sahoo**; entered: Aug. 2021; expected PhD: May 2026

Distinctions: Ross Fellowship

6. **Raymond Martinez**; entered: Aug. 2021; expected PhD: May 2026

Distinctions: Purdue Doctoral Fellowship; H. C. Brown Poster Award

5. **Hayden Bishop**; entered: Aug. 2020; expected PhD: May 2025

4. **Kyle Brook**; entered: Aug. 2019; expected PhD: Dec. 2024

3. **Mingxin Liu**; entered: Aug. 2019; expected PhD: Dec. 2024

Distinctions: Ross Fellowship; H.C. Brown Poster Award; H.C. Brown Student Research Award; Bilsland Dissertation Award

2. **Christopher Rybak**; entered: Aug. 2019; expected PhD: Dec. 2024

Distinctions: Arthur Kelly Teaching Award, Emerson Kampen Fellowship

1. **Wen Xiu**; entered: Aug. 2019; expected PhD: Dec. 2024

Distinctions: H.C. Brown Poster Award